

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



537883

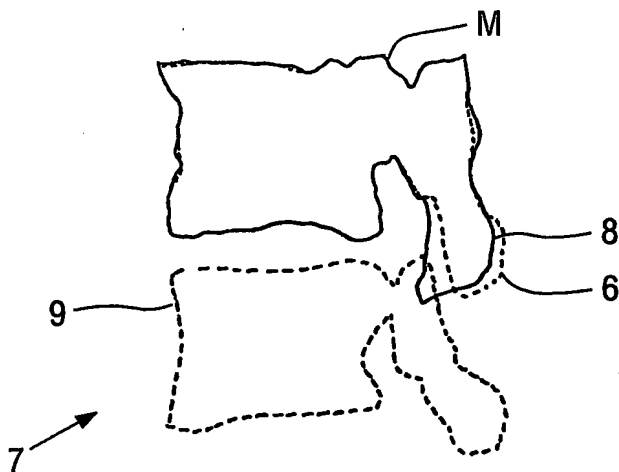
(43) International Publication Date  
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number  
**WO 2004/053792 A1**

- (51) International Patent Classification<sup>7</sup>: **G06T 5/00** Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
- (21) International Application Number: PCT/IB2003/005664 (74) Agent: **VOLMER, Georg**; Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
- (22) International Filing Date: 5 December 2003 (05.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 02102735.4 12 December 2002 (12.12.2002) EP
- (71) Applicant (for DE only): **PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-damm 94, 20099 Hamburg (DE).
- (71) Applicant (for all designated States except DE, US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KAUS, Michael** [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). **TIMINGER, Holger** [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). **PEKAR, Vladimir** [RU/DE]; c/o Philips
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
- with international search report
  - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF SEGMENTING A THREE-DIMENSIONAL DATA SET ALLOWING USER CORRECTIONS



(57) Abstract: The invention relates to a method of segmenting a three-dimensional structure from a three-dimensional, and in particular medical, data set while making allowance for user corrections. The method is performed with the help of a deformable three-dimensional model whose surface is formed by a network of nodes and meshes that connect these nodes. Once the model has been positioned at the point in the three-dimensional data set at which the structure to be segmented is situated and positions of nodes have, if necessary, been changed by known methods of segmentation, any desired nodes can be displaced manually. The nodes of the model are re-calculated by making weighted allowance for the nodes that have been displaced manually.

WO 2004/053792 A1